

CLAIMS

1. A sample collection device for collecting and storing a biological sample for subsequent analysis, comprising tamper-evident storage means for storing said sample, said storage means comprising:

5 a base sheet arranged so that the biological sample may be positioned thereon;

a cover sheet hingedly secured to said base sheet, said cover sheet being adapted for substantially 10 irreversible adhesive securement to said base sheet over at least a substantial portion of their facing surfaces; and

a backing sheet releasably secured to the surface of said cover sheet facing said base sheet;

15 wherein said storage means is suitable for digestion together with said biological sample.

2. A device as claimed in claim 1 wherein the cover sheet is coated with a permanent adhesive across its 20 entire surface, and the portion of the cover sheet to which the backing sheet is not secured constitutes the hinged connection between the cover sheet and the base sheet.

25 3. A device as claimed in claim 2 wherein the adhesive is a pressure-sensitive adhesive.

4. A device as claimed in any one of claims 1, 2 or 3 wherein print is on the reverse of said base sheet.

30 5. A device as claimed in claim 4 wherein a bar code is printed on the reverse of said base sheet.

35 6. A device as claimed in any one of claims 1 or 2 to 5 wherein the base sheet is paper.

- 19 -

7. A device as claimed in claim 6 wherein the base sheet is gloss art paper.

8. A device as claimed in any one of claims 1 or 2
5 to 7 wherein the cover sheet is a clear polypropylene film.

9. A device as claimed in any one of claims of 1 or
2 to 8 wherein the backing sheet is a release paper.

10. 10. A system for the analysis of a biological sample, comprising:

15 a sample collection device for collecting and storing a biological sample comprising tamper-evident storage means for storing said sample, said storage means being adapted for digestion together with said biological sample for analysis;

means for taking at least a portion of said sample for analysis together with at least the part of
20 said storage means in which it is encased;

means for digesting said sample, or portion thereof, together with at least said part of said storage means; and

means for analysing said sample.

25 11. A system as claimed in claim 10 wherein the device is a device as defined in any one of claims 1 or 2 to 9.

30 12. A system as claimed in claim 10 or claim 11 wherein a hole punch takes a portion of said sample for analysis together with that part of the storage means in which it is encased.

35 13. A system as claimed in any one of claims 10 to 12 wherein said sample is digested in an alkali extraction.

- 20 -

14. A system as claimed in any one of claims 10 to 13 wherein said sample is subjected to amplification by PCR and then DNA sequencing.

5 15. A method of collecting and storing a biological sample for subsequent analysis, comprising the steps of:

providing a sample collection device for collecting and storing a biological sample comprising tamper-evident storage means for storing said sample, said 10 storage means comprising:

a base sheet arranged so that the biological sample may be positioned thereon;

a cover sheet hingedly secured to said base sheet, said cover sheet being adapted for substantially 15 irreversible adhesive securement to said base sheet over at least a substantial portion of their facing surfaces;

a backing sheet releasably secured to the surface of said cover sheet facing said base sheet;

wherein said storage means is suitable for 20 digestion together with said biological sample; and storing said sample on a base sheet in said storage means.

16. A method as claimed in claim 15 wherein the device is a device as defined in any one of claims 1 or 2 25 to 9.

17. A method as claimed in claim 15 or claim 16 wherein said biological sample is stored for an extended period of time.

30 18. A method of analysing a biological sample, comprising the steps of:

providing a sample collection device for storing a biological sample comprising tamper-evident storage 35 means for storing said sample, said storage means being suitable for digestion together with said biological sample;

- 21 -

taking at least a portion of said sample together with at least the part of said storage means in which it is encased;

5 digesting said sample, or portion thereof, together with at least said part of said storage means; and

analysing said sample.

19. A method as claimed in claim 18 wherein the device is a device as defined in any one of claims 1 or 2
10 to 9.

20. A method as claimed in claim 18 or claim 19 wherein a portion of said sample is punched out of the sample collection device with a hole punch.

15 21. A method as claimed in any one of claims 18 to 20 wherein said sample is digested in an alkali extraction.

22. A method according to any one of claims 18 to 216
20 wherein said sample is subjected to amplification by PCR and then DNA sequencing.

25 23. A sample collection device for collecting and storing a biological sample for subsequent analysis, comprising:

a base sheet arranged so that the biological sample may be positioned thereon;

30 a cover sheet hingedly secured to said base sheet, said cover sheet being adapted for substantially irreversible adhesive securement to said base sheet over at least a substantial portion of their facing surfaces; and

a backing sheet releasably secured to the surface of said cover sheet facing said base sheet.

35 24. A sample collection device as claimed in claim 23 wherein print is on the reverse of said base sheet.

- 22 -

25. A sample collection device as claimed in claim 23 wherein a bar code is printed on the reverse of said base sheet.

5

26. A sample collection device as claimed in any one of claims 23 to 25 wherein the base sheet is paper.

10 27. A sample collection device as claimed in claim 26 wherein the base sheet is gloss art paper.

15 28. A sample collection device as claimed in any one of claims 23 to 27 wherein the cover sheet is coated with a permanent adhesive across its entire surface, and the portion of the cover sheet to which the backing sheet is not secured constitutes the hinged connection between the cover sheet and the base sheet.

20 29. A sample collection device as claimed in claim 28 wherein the adhesive is a pressure-sensitive adhesive.

30 30. A sample collection device as claimed in any one of claims 23 to 29 wherein the cover sheet is a clear polypropylene film.

25

31. A sample collection device as claimed in any one of claims of 23 to 30 wherein the backing sheet is a release paper.

30 32. A method of collecting and storing a biological sample, comprising the steps of:

35 applying said biological sample to a base sheet having a cover sheet hingedly secured thereto, said cover sheet being adapted for substantially irreversible adhesive securement to said base sheet over at least a substantial portion of their facing surfaces and bearing a backing sheet releasably secured thereto;

- 23 -

removing said backing sheet; and
allowing said cover sheet to adhere substantially
irreversibly to the base sheet and/or the biological
sample positioned on said base sheet.

5

3100143343 * 046902